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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,920	01/12/2007	Bruce Stanley Gunton	SWIN 3530	2084

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EXAMINER	
LIU, HENRY Y	

ART UNIT	PAPER NUMBER
3654	

MAIL DATE	DELIVERY MODE
01/24/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,920	GUNTON, BRUCE STANLEY	
	Examiner	Art Unit	
	HENRY LIU	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/15/2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Claims 37-45 are pending. The amendment of 12/15/2010 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over GARLAND (3,132,729) in view of VELKOFF (2,912,871).

Regarding Claim 37, A drive arrangement for a shaft (7), the arrangement having a module which is carried, in use, by the shaft and includes a source of power (Col. 1 lines 44-57), a driven wheel (13) fixed, in use, for rotation with the shaft (7) and drivable, in use, by the motor, and clutch means (32, 25, 27, 14) operable between the motor and the wheel (13), the clutch means including a base structure (25) carried, in use, by the shaft (7), a first carriage structure (1) movable relative to the base structure (25) and carrying the motor, a drive wheel (12) driven by the motor, and a belt (14)

around the drive wheel (12) and the driven wheel (13), whereby the belt (14) can be releasably engaged with the wheels (12) (13) by means of movement of the first carriage structure (1) relative to the base structure (25), and wherein control means (31) are provided and are operable, in use, to releasably apply a force between the first carriage structure (1) and the base structure (25), to urge apart the drive wheel (12) and the driven wheel (13), thereby engaging the clutch means (32, 25, 27, 14), and wherein the arrangement includes a second carriage structure (18) movable relative to the base structure (25) into and out of driving engagement with the shaft (7), and wherein the control means (31) is operable to cause the second carriage structure (18) to move into and out of driving engagement as soon as the clutch means (32, 25, 27, 14) is disengaged and engaged, respectively.

GARLAND does not teach a motor being the source of power.

VELKOFF teaches a motor (M) being a source of power which drives a transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the electric motor in VELKOFF to power the transmission.

Regarding Claim 39, GARLAND teaches wherein the second carriage structure includes manually operable drive means (16) for manually driving the shaft (7) when the second carriage structure (18) and the shaft (7) are in driving engagement.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over GARLAND (3,132,729) in view of VELKOFF (2,912,871) and further in view of MITCHELL (2,911,849).

Regarding Claim 38, GARLAND as modified teaches wherein the second carriage structure (18) and the shaft (7) carry respective members which mesh when the second carriage structure (18) and the shaft (7) are in driving engagement.

GARLAND does not teach toothed members.

MITCHELL teaches toothed members which mesh (32) (20) depending on drive mode.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the gears in MITCHELL create better drive engagement.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over GARLAND (3,132,729) in view of VELKOFF (2,912,871) and further in view of SMITH (808,878).

Regarding Claim 40, GARLAND as modified teaches toothed members (outer surface of 13) (17).

GARLAND does not teach wherein the manually operable drive means comprise a wheel operable to turn by means of an elongate closed loop member, the wheel being coupled with the toothed member of the second carriage structure, to cause the shaft to be driven when the wheel is turned and the toothed members are meshed.

SMITH teaches wherein the manually operable drive means (7) comprise a wheel (19) operable to turn by means of an elongate closed loop member (28), the wheel (19) being coupled with the member (18) of the second carriage structure, to cause the shaft to be driven when the wheel (19) is turned and the members (14) (18) are meshed. When the vehicle rolls downhill, the wheel (7) becomes a drive means for the transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the manually operable means in SMITH to allow the transmission to generate electricity.

Claims 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over GARLAND (3,132,729) in view of VELKOFF (2,912,871) and BENT (4,409,779) and further in view of HART (893,999).

Regarding Claim 41, GARLAND does not teach wherein the control means is a Bowden cable extending from the assembly to the remote location and having an inner cable and sheath attached to respective ones of the first and second carriage

structures, whereby the said force may be applied by manipulation of the Bowden cable at the remote location.

BENT teaches wherein the control means is a Bowden cable (105) extending from the assembly (85) to the remote location (103) and having an inner cable and sheath.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAD with the cable in BENT to allow the transmission mode to be shifted using a pull cable control.

HART teaches attached to respective ones of the first (A) and second (G) carriage structures, whereby the said force may be applied by manipulation of the Bowden cable at the remote location.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAD with control acting between the first and second carriages as in BENT to allow the transmission mode to be shifted through movement of the second carriage.

Regarding Claim 42, GARLAND as modified teaches wherein spring means (29) are provided to urge the second carriage member (18) into driving engagement with the shaft (7), when the Bowden cable (BENT 105) is released.

Regarding Claim 43, GARLAND as modified does not teach wherein the sheath is attached to the second carriage member.

BENT teaches the sheath attached to a frame member. It could be placed on the actuating member just the same.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the sheath attached to the second carriage member so that the cable placement is easily routed to a convenient place for the user to control.

Regarding Claim 44, GARLAND as modified does not teach wherein the inner cable is attached to the first carriage member.

BENT teaches the inner cable attached to an actuating member. It could be placed on the frame just the same.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the sheath attached to the first carriage member so that the cable placement is easily routed to a convenient place for the user to control.

Regarding Claim 45, GARLAND as modified does not teach wherein the sheath is fixedly mounted at the remote location, whereby the clutch means may be operated by manipulation of the inner cable relative to the sheath.

BENT teaches wherein the sheath (101) is fixedly mounted at the remote location (Fig. 1), whereby the clutch means may be operated by manipulation of the inner cable relative to the sheath.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission in GARLAND with the sheath attached at a remote location so that the cable placement is in a convenient place for the user to control.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY LIU whose telephone number is (571) 270-7018. The examiner can normally be reached on Mon-Thurs 7:30am - 5:00pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL MANSEN can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael R Mansen/
Supervisory Patent Examiner, Art Unit 3654

/H. L./
Examiner, Art Unit 3654